#### REMARKS

This response has been prepared in response to the Office action mailed on 10 August 2006 (Paper No. 20060724).

# Listing of the Claims

Claims 1 through 13 and 23 are pending in the application, and are set forth in the following listing. Pursuant to 37 CFR §121(c), the claim listing, including the text of the claims, will serve to replace all prior versions of the claims, in the application.

#### **Status of Claims**

Prior to entry of this response, claims 12 through 42 were pending in the application. Claims 1 through 11 were previously canceled without prejudice or disclaimer of their subject matter.

## **Amendment of the Claims**

By this response, dependent claims 35 and 36 are amended to, *inter alia*, shift their dependencies.

# **Claim Objections**

## Claim 14

Paper No. 20060724 objected to Claim 14, but failed to state any factual basis for that objection. Paper No. 20060724 is therefore incomplete. Pursuant to 37 CFR §1.104(a) and (b), written clarification is subsequent, non-final Office correspondence is respectfully requested in order that Applicant may be fairly accorded an opportunity to respond.

### Claims 35 and 36

Paper No. 20060724 also noted that:

claim 35, line 2: "said oscillator" lacks antecedent basis, and

claim 36, line 3: "said collet" lacks antecedent basis.

The foregoing amendments shift the corresponding dependencies of claim s35 and 36, thereby rendering this objection moot. The care of the Examining staff in noting these items is noted with appreciation by the Applicant.

## Claim Rejections - 35 U.S.C. § 103(a)

Claims 12 through 38 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,402,368 to Grimm *et al.* in view of U.S. Patent No. 4,215,532 to Perrot. Applicant respectfully traverses this rejection for the following reasons.

## Claim 12

The Examiner states that, Grimm et al. '368 discloses,

"a time indicator comprising a movement element (15) and discloses a flying tourbillon module (2) shown but not labeled as such (Fig. 2), said flying tourbillon module being visible from a dial side of said movement element (Fig. 1), wherein said flying tourbillon module comprises an independent element relative to said time indicator (Fig. 1), said flying tourbillon module is capable of being removably separable as said flying tourbillon module from the movement element via a rear side of the said time indicator. Furthermore, there are barrels (springs) placed between the back of the watch, so the tourbillon cannot be removed unless the barrels are first taken out which would then allow the tourbillon to removably separable via the rear side. Grimm discloses a device as stated above with regards to claim 12. Grimm discloses all the subject matter claimed by applicant with the exception of the limitation stated in claim 12, i.e., a cantilvered bearing."

The Examiner further states that Perrot '532 teaches,

"a balance/collet assembly comprising a bearing (2)", and therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add the bearing of Perrot '532 to the balance/collet assembly, as taught by Grimm *et al.* '368 in order to be detachable from the remainder of the movement as suggested by Perrot '532.

This rationale given by the Examining staff in support of the rejection is without factual basis.

First, a thorough reading of the Examining staff's proposed combination fails to disclose any teaching about the assertion by the Examining staff that "said flying tourbillon module is capable of being removably separable as said flying tourbillon module from the movement element via a rear side of the said time indicator." Applicant's claim 1, defines, inter alia,

"a movement element; and

a flying tourbillon module, said flying tourbillon module being visible from a dial side of said movement element ... and said flying tourbillon module is removably separable as said flying tourbillon module from said movement element via a rear side of said time indicator."

Moreover, the proposed combination of the Examining staff expressly teaches that,

"[r]egulating device 2, escapement 3 and gear train 4 are mounted on a plate 6 fixed to a pipe 7 which is rotatably mounted on a support plate 8. Pipe 7 is situated at the center of the watch and is driven continuously in rotation by a driving device 9."<sup>2</sup>

Unexplained in Paper No. 20060724 is precisely how "regulating device 2" might be removed through both "plate 6" and through "support plate 8" which would be necessary to meet Applicant's structure that advantageously enabling a:

"flying tourbillon module [that] is removably separable as

Applicant's pending claim 12.

<sup>&</sup>lt;sup>2</sup> Grimm, et al. '368, column 2, lines 30-34.

said flying tourbillon module from said movement element via a rear side of said time indicator"<sup>3</sup>?

Applicant submits that the utter absence of openings or apertures in either "plate 6" and through "support plate 8" of the Examining staff's proposed combination that would be necessary to permit "regulating device 2" to be removed "from said movement element via a rear side of said time indicator."

Second, claim 12 also defines Applicant's structure in terms of:

"a movement element; and

a flying tourbillon module ... flying tourbillon module comprising a cantilevered bearing that supports said flying tourbillion module ... ."5

Paper No. 20060724 however, makes the assertion that,

"Grimm discloses all the subject matter claimed by applicant with the exception of the limitation stated in claim 12, i.e., a cantilvered bearing. ... Perrot '532 teaches, 'a balance/collet assembly comprising a bearing (2)', and therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add the bearing of Perrot '532 to the balance/collet assembly, as taught by Grimm et al. '368 in order to be detachable from the remainder of the movement as suggested by Perrot '532.."

In contradistinction to the foregoing assertion by the Examining staff, the proposed combination of the Examining staff expressly teaches a structure with:

<sup>&</sup>lt;sup>3</sup> Applicant's pending claim 12.

<sup>&</sup>lt;sup>4</sup> Applicant's pending claim 12.

<sup>&</sup>lt;sup>5</sup> Applicant's pending claim 12.

"pipe 7 carrying plate 6 is pivotably mounted in a support plate 8. In fact this support plate is fixed to a barrel bridge 46 in which pipe 7 is also pivotably mounted, so that the pipe [7] is held in place radially and axially by pipe 8 and by barrel bridge 46 (see FIG. 3)."

In short, even ignoring arguendo the absence of a prima facie showing of the structure defined by claim 12, modification of the primary reference to incorporate "a balance/collet assembly comprising a bearing (2)" from the secondary reference would impermissibly destroy the intended mode of operation of the primary reference with "pipe 7 carrying plate 6 ... so that the pipe [7] is held in place radially and axially by pipe 8 and by barrel bridge 46 (see FIG. 3)."

Third, claim 12 defines, inter alia, a structure with

"a flying tourbillon module ... comprising a cantilevered bearing that supports said flying tourbillion module ... ."8

As earlier noted here, the proposed combination of the Examining staff however, requires a structure in which "pipe 7 carrying plate 6 ... so that the pipe [7] is held in place radially and axially by pipe 8 and by barrel bridge 46 (see FIG. 3)." This construction with both radial and axial support is the antithesis of a cantilevered structure. Consequently, the proposed combination fails to make a prima facie showing of obviousness, and may not be maintained under 35 U.S.C. §1203(a). Withdrawal of this rejection and allowance of claim 12, together claims 13 through 23, 35 and 36 depending thereon, as well as claim 24 (together with claims 25 through 34 and 37 depending

<sup>6</sup> Grimm et al. '368, column 3, lines 31-35.

<sup>&</sup>lt;sup>7</sup> Grimm *et al.* '368, column 3, lines 31-35.

<sup>8</sup> Applicant's pending claim 12.

<sup>&</sup>lt;sup>9</sup> Grimm *et al.* '368, column 3, lines 31-35.

thereon)<sup>10</sup> and 38 (together with claims 39 through 42 depending thereon)<sup>11</sup> under 35 U.S.C. §103(a) by the combination proposed by the Examining staff. Accordingly, this rejection may not be maintained. Such action is respectfully urged.

## Claims 24, 26-34, 37

The Examiner states that the method steps will be met during the normal assembly/disassembly of the apparatus stated above in claim 12. Applicant respectfully disagrees.

First, claim 24 defines, among others process features,

"providing the time indicator with a movement element and regulatory elements;

providing a flying tourbillon module comprised of a plurality of elements forming an integral module supporting the regulatory elements; and

mounting the flying tourbillon module in the movement as said integral module removably separable from the movement element."

In contrast, the Examining staff's proposed combination expressly teaches a construction with:

"regulating device 2, escapement 3 and gear train 4 are on

Although the foregoing paragraphs were directed to, and excerpted language from independent claim 12, the patentably distinguishable features discussed in those paragraphs are also applicable to claims 24 through 34 and 37 and those paragraphs should be accordingly so considered by the Examining staff.

Although the foregoing paragraphs were directed to, and excerpted language from independent claim 24, the patentably distinguishable features discussed in those paragraphs are also applicable to claims 38 through 42, and those paragraphs should be accordingly so considered by the Examining staff.

plate 6. The tourbillon described in Swiss Patent No. 33368<sup>12</sup> includes that same elements except gear train 4, since the escapement pinion then meshes directly with the fixed wheel."<sup>13</sup>

In short, the proposed combination of the Examining staff is the antithesis of that defined by Applicant's claim 24; that proposed combination lacks Applicant's step of "mounting the flying tourbillon module in the movement as said integral module removably separable from the movement element" because "regulating device 2" is integrated via gear train 4 and its "plurality of wheel and pinion sets ... [(respectively 60, 61 and 62) ... and (63, 64 and 65)]" assuring a gear link between escapement pinion 52 and fixed wheel 5." As is expressly explained by the Examining staff's proposed combination, "fixed wheel 5 and motion work 15 are situated underneath plate 6 ... ." Consequently, because the Examiner's proposed combination teaches a "regulating device 2" which is integrated into the movement, that proposed combination is devoid of Applicant's "flying tourbillon module in the movement as said integral module removably separable from the movement element" precisely because there is neither discussion nor teaching about how upper structure mounted upon plate 6 and borne by pipe 7 is sequentially disassembled and remove; there is in other words, simply no prima facie showing of obviousness. This rejection may not therefore, be maintained.

Second, claim 24 defines among other features,

"A method of assembling a time indicator with a balance

Louis Linzaghi, Brevet No. 33368, *Mouvement de montre*, Confederation Suisse, issued on the 2<sup>nd</sup> April 1905.

<sup>13</sup> Grimm et al. '368, column 4, lines 6-10.

Grimm et al. '368, column 4, lines 11-19.

<sup>15</sup> Grimm et al. '368, column 2, lines 45-47.

spring flying tourbillon ... ."16

The Examining staff's proposed combination is however, an improvement upon Louis Linzaghi's Mouvement de montre, 17 albeit with the addition of "gear train 4." 18 This not Applicant's flying tourbillon. As was explained earlier during this examination, historically, a tourbillon is complicated mechanism which is believed to have originally been invented by Abraham Louis Breguig (1747-1823) in 1801, and patented on the 7th Messidor of year IX on the calendar of the French Revolution, that is, on the 26th of June 1801. The aim of the tourbillon mechanism is to improve the precision of a mechanical watch by statical equilibrium of mechanical in exactness. The setup of the original tourbillon, especially the bearings of the cage, is quite different from the invention defined by the pending claims.

Generally, all tourbillons have in common a balance wheel which is mounted on a rotating platform, springs, an anchor and an escape wheel. These to a certain extent are subject to the force of the Earth's gravitational pull, which comes permanently into play due to the ever-changing center of gravity of the system and, consequently, influences the precision of the movement. Louis Breguet did not try experimenting with shapes or the mutual repositioning of parts, but approached the problem of arrhythmia from a different angle by placing the entirety of the whole moving mechanism in a rotatable casing that would complete one revolution per minute in the opposite direction. Thus, errors due to gravitation could be evened out and the hands of the watch would move with a precision

In its entirety, process claim 24 defines: "the steps of: (a) providing the time indicator with a movement element and regulatory elements; (b) providing a flying tourbillon module comprised of a plurality of elements forming an integral module supporting the regulatory elements; and (c) mounting the flying tourbillon module in the movement as said integral module removably separable from the movement element."

Louis Linzaghi, Brevet No. 33368, *Mouvement de montre*, Confederation Suisse, issued on the 2<sup>nd</sup> April 1905.

<sup>18</sup> Grimm et al. '368, column 4, line 7.

that approaches perfection. Modern tourbillons have between forty and ninety parts with a total weight of between about 0.2 and 0.6 grams.

In contrast to a normal mechanical movement of a timepiece, the balance wheel of a tourbillon not only oscillates back-and-forth, but additionally rotates continuously around an oscillating axis, with the movement of rotation and movement of oscillation from rotating movement being overlaid onto the oscillating movement.

Tourbillons are time intensive to construct and assemble principally due to the complicated structure and the difficulty in separating the tourbillon from the remainder of the watch movement. Consequently, watches containing tourbillons are extremely expensive, beginning at approximately U.S. \$100,000.00. The primary difficulty in the construction of a timepiece containing a tourbillon has, heretofore, been that the watch movement has been constructed and assembled around the tourbillon. Therefore, when the tourbillon requires maintenance, it is generally necessary to disassemble the watch movement, almost completely, in order to gain access to the tourbillon's mechanism.

The term *flying tourbillon*, as that term appears in Applicant's claims 12, 24 and 38, is art recognized nomenclature. In 1927, Alfred Gelwig invented the *flying* tourbillon with a rotor attached on only one side, so that the delicate mechanism of the tourbillon (e.g., the assembly formed by the rotating platform which forms the tourbillon's cage, the balance wheel which is mounted on the rotating platform, the springs, the anchor and the escape wheel) is suspended within the casing of the watch by a barely visible pivot in order to give the illusion that the tourbillon is flying.

Unlike either Applicant or Alfred Gelwig, The proposed combination of the Examining staff teaches not a *flying tourbillon*, but is analogous to a simple *regulating device*, that is a *tourbillon* which is only loosely so identified as "answering the generic description ... described in Swiss Patent No. 33 368." The construction of this

Grimm et al. '368, column 1, lines 13 and 14. This is consistence with Applicant's earlier statement that tourbillions generally have in common a balance wheel which is mounted on a rotating platform, springs, an anchor and an escape wheel.

regulating device 2 between plate 6 and gear train bridge 66 negates any flying characteristic to the regulating device 2 with a rotor attached on only one side; in point of fact, the necessarily fixed plane of rotation generally centered around the axis of pipe 7 is inimical to a flying characteristic. Moreover, the flying tourbillon was not invented until 1927, and then by Alfred Gelwig, which is some two decades after the date of "Swiss Patent No. 33 368."20 Neither Swiss Patent No. 33 368"21 nor the improvement thereon by the primary reference, either teach or suggest a flying tourbillon; simply put, the proposed combination advocated by the Examining staff lacks any aspect of continuous rotation around an oscillating axis, with the movement of rotation and movement of oscillation from rotating movement being overlaid onto the oscillating movement, such as may be attained with the delicate mechanism of the tourbillon (e.g., the assembly formed by the rotating platform which forms the tourbillon's cage, the balance wheel which is mounted on the rotating platform, the springs, the anchor and the escape wheel) being suspended within the casing of the watch by a barely visible pivot in order to give the illusion that the tourbillon is flying. Consequently, the absence of either teaching or suggestion of a flying tourbillon is a convincing demonstration of the absence of a prima facie demonstration of obviousness vel non of Applicant's claims 12 (together claims 13 through 23, 35 and 36 depending thereon),<sup>22</sup> 24 (together with claims 25 through 34 and 37 depending thereon) and 38 (together with claims 39 through 42 depending thereon)<sup>23</sup>

Grimm et al. '368, column 1, lines 13 and 14. This is consistent with Applicant's earlier statement that tourbillions generally have in common a balance wheel which is mounted on a rotating platform, springs, an anchor and an escape wheel.

Grimm et al. '368, column 1, lines 13 and 14.

Although the foregoing paragraphs were directed to, and excerpted language from independent claim 24, the patentably distinguishable features discussed in those paragraphs are also applicable to claims 12 through 23, 35 and 36, and those paragraphs should be accordingly so considered by the Examining staff.

Although the foregoing paragraphs were directed to, and excerpted language from independent claim 24, the patentably distinguishable features discussed in those

under 35 U.S.C. §103(a) by the combination proposed by the Examining staff. Accordingly, this rejection may not be maintained. Such action is respectfully urged.

#### Claim 38

The Examiner asserts that Grimm et al. '368 discloses,

"a time indicator with a balance spring (50) comprising a movement (15), a flying tourbillon module (2), said flying tourbillon module comprising a balance bridge a collet forming a cage with said balance bridge; a shaft a balance mounted on said shaft disposed in said cage between said collet and said balance bridge, a regulator; and a cannon whereto said cage is attached to, wherein said flying tourbillon module is visible from a dial side of said movement; wherein said flying tourbillon module is designed as an independent element relative to said time indicator, and said flying tourbillon module is separable as said flying tourbillon module from said movement element via a rear side of the time indicator. Furthermore, there are barrels (springs) placed between the back of the watch, so the tourbillon cannot be removed unless the barrels are first taken out which would then allow the tourbillon to removably separable via the rear side."

The Examiner further states that Grimm et al. '368 discloses,

"a device as stated with regards to claim 38, that is all the subject matter claimed by applicant with the exception of the

paragraphs are also applicable to claims 38 through 42, and those paragraphs should be accordingly so considered by the Examining staff.

limitation stated in claim 38, i.e., a cantilevered bearing."
The Examiner then states that Perrot '532 teaches,

"a balance/collet assembly comprising a bearing (2)", and therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add the bearing of Perrot '532 to the balance/collet assembly as taught by Grimm *et al.* '368 in order to be detachable from the remainder of the movement as suggested by Perrot '532.

First, claim 3824 defines among other features,

"a flying tourbillon ... ."24

As was earlier noted herein, the Examining staff's proposed combination is however, an improvement upon Louis Linzaghi's *Mouvement de montre*, 25 albeit with the addition of

In its entirety, apparatus claim 38 defines:

<sup>&</sup>quot;a movement; and

a flying tourbillon module;

said flying tourbillon module comprising a cantilevered bearing that supports a flying tourbillon assembly;

said flying tourbillon assembly comprising:

a balance bridge;

a collet forming a cage with said balance bridge;

a shaft;

a balance mounted on said shaft disposed in said cage between said collet and said balance bridge;

a regulator; and

a cannon whereto said cage is attached to, wherein said flying tourbillon module is visible from a dial side of said movement;

wherein said flying tourbillon module is designed as an independent element relative to said time indicator; and

said flying tourbillon module is separable as said flying tourbillon module from said movement element via a rear side of said time indicator."

Louis Linzaghi, Brevet No. 33368, *Mouvement de montre*, Confederation Suisse, issued on the 2<sup>nd</sup> April 1905.

"gear train 4."<sup>26</sup> This not Applicant's *flying tourbillon*. The setup of the original tourbillon, especially the bearings of the cage, is quite different from the invention defined by the pending claims. Generally, all tourbillons have in common a balance wheel which is mounted on a rotating platform, springs, an anchor and an escape wheel. The term *flying tourbillon*, as that term appears in Applicant's claims 12, 24 and 38, is art recognized nomenclature.<sup>27</sup> In 1927, Alfred Gelwig invented the *flying* tourbillon with a rotor attached on only one side, so that the delicate mechanism of the tourbillon (e.g., the assembly formed by the rotating platform which forms the tourbillon's cage, the balance wheel which is mounted on the rotating platform, the springs, the anchor and the escape wheel) is suspended within the casing of the watch by a barely visible pivot in order to give the illusion that the tourbillon is flying.

Unlike either Applicant or Alfred Gelwig, The proposed combination of the Examining staff teaches not a *flying tourbillon*, but is analogous to a simple *regulating device*, that is a *tourbillon* which is only loosely so identified as "answering the generic description ... described in Swiss Patent No. 33 368." The construction of this *regulating device* 2 between plate 6 and gear train bridge 66 negates any *flying* characteristic to the *regulating device* 2 with a rotor attached on only one side; in point of fact, the necessarily fixed plane of rotation generally centered around the axis of pipe 7 is inimical to a *flying* characteristic. Moreover, the *flying tourbillon* was not invented until

<sup>&</sup>lt;sup>26</sup> Grimm *et al.* '368, column 4, line 7.

See, for example, Taiyu Kiu, U.S. Patent No. 6.367.965 issued on the 9<sup>th</sup> of April 2002 for an *Indicating Device for Various Types of Rotation Escape Regulator*, and claiming priority from a 21<sup>st</sup> October 1999 PCT publication date.

Grimm et al. '368, column 1, lines 13 and 14. This is consistence with Applicant's earlier statement that tourbillions generally have in common a balance wheel which is mounted on a rotating platform, springs, an anchor and an escape wheel.

1927,29 and then by Alfred Gelwig, which is some two decades after the date of "Swiss Patent No. 33 368."30 Neither Swiss Patent No. 33 368"31 nor the improvement thereon by the primary reference, either teach or suggest a flying tourbillon; simply put, the proposed combination advocated by the Examining staff lacks any aspect of continuous rotation around an oscillating axis, with the movement of rotation and movement of oscillation from rotating movement being overlaid onto the oscillating movement, such as may be attained with the delicate mechanism of the tourbillon (e.g., the assembly formed by the rotating platform which forms the tourbillon's cage, the balance wheel which is mounted on the rotating platform, the springs, the anchor and the escape wheel) being suspended within the casing of the watch by a barely visible pivot in order to give the illusion that the tourbillon is flying. Consequently, the absence of either teaching or suggestion of a flying tourbillon is a convincing demonstration of the absence of a prima facie demonstration of obviousness vel non of Applicant's claims 38 (together with claims 39 through 42 depending thereon)<sup>32</sup> under 35 U.S.C. §103(a) by the combination proposed by the Examining staff. Accordingly, this rejection may not be maintained. Such action is respectfully urged.

Second, and as is noted earlier in this paper, Paper No. 20060724 impermissibly

Taiyu Kiu, U.S. Patent No. 6.367.965 issued on the 9th of April 2002 for an *Indicating Device for Various Types of Rotation Escape Regulator*, and claiming priority from a 21st October 1999 PCT publication date, asserts that a *tourbillon* as invented by "a Swiss" in 1801, and that a *flying tourbillon* was invented "in 1930."

Grimm *et al.* '368, column 1, lines 13 and 14. This is consistent with Applicant's earlier statement that *tourbillions* generally have in common a balance wheel which is mounted on a rotating platform, springs, an anchor and an escape wheel.

Grimm et al. '368, column 1, lines 13 and 14.

Although the foregoing paragraphs were directed to, and excerpted language from independent claim 24, the patentably distinguishable features discussed in those paragraphs are also applicable to claims 38 through 42, and those paragraphs should be accordingly so considered by the Examining staff.

fails to explain is precisely how "regulating device 2" might be removed through both "plate 6" and through "support plate 8" which would be necessary to meet Applicant's structure that advantageously enabling a:

"said flying tourbillon module [that is separable] from said movement element via a rear side of said time indicator." 33?

Applicant submits that the utter absence of openings or apertures in either "plate 6" and through "support plate 8" of the Examining staff's proposed combination that would be necessary to permit "regulating device 2" to be "separable ... from said movement element via a rear side of said time indicator" as is required by Applicant's claims 38 through 42.

Second, and as was explained on page 3 of Applicant's English language translation of the original specification, the time indicator defined by the pending claims is, as a "whole", "fully separable from the movement, which advantageously enables Applicant's tourbillon module to be 'assembled by itself and be adjusted outside the movement' as a module." Specifically, Applicant's tourbillon module may be removed to the backside of the timepiece, as is best seen from Applicant's Figures 5 and 6, without requiring disassembly of movement of the time indicator.

Independent claims 12, 24 and 38 reflect this difference in structure, with claims 12 and 38 defining a time indicator "comprising a movement element and a flying tourbillon module," with "said flying tourbillon module comprises an independent element relative to said time indicator." Process claim 24 defines the assembly as comprising the steps of "providing the time indicator" and "providing a flying tourbillon module" with "a plurality of elements forming an interval module for supporting the regulatory elements" of the "time indicator" and "mounting the flying tourbillon module in a time indicator as said *integral module* separable from the movement element."

Applicant's pending claim 38.

Applicant's pending claim 38.

In contradistinction, The proposed combination of the Examining staff, as shown in the single Figure placed in Paper No. 20060724, mounts the "regulating device 2" above the two spaced-apart main plates 6 and 8 a portable timepiece such as a watch, in order to assure "the elements mounted thereon to be complete visible, from the center to the periphery thereof."35 The proposed combination makes neither teaching nor suggestion of Applicant's step of "mounting the flying tourbillon module in the movement as said integral module removable separable from the movement element."36 In short, in proposed combination tumbling tourbillon taught by Paper No. 20060724 is integrated into the movement of the time indicator, and is not constructed either as a "module" or as a "module which is separable from said movement element via a rear side of said time indicator." In essence, the integration of the tourbillon taught by Paper 20060724 requires partial, if not complete disassembly as is required to gain access to, and enable removal of the structure mounted upon plate 6 via the crystal face of the The sheer impossibility of the proposed combination advocated by the timepiece. Examining staff be able to meet the express definition of Applicant's inventions given by claims 38 through 42 convincingly demonstrates the absence of a prima facie showing of obviousness under 35 U.S.C. §103(a). Withdrawal of this rejection is therefor required.

### Claims 13-23, 25-37 and 39-42

The separate assertions made by the Examining staff addressing the various features defined by Applicant's dependent claims 13 through 23, 35 and 36 depending upon claim 12, claims 25 through 34 and 37 depending upon claim 24, and claims 39 through 42 depending on claim 38, do not negate the deficiencies under 35 U.S.C. §103(a) in the combination of art proposed by the Examining staff demonstrated in the

<sup>&</sup>lt;sup>35</sup> Grimm, et al. '368, column 2, lines 36-38.

<sup>&</sup>lt;sup>36</sup> Claim 24, lines 6 and 7.

PATENT P56687

foregoing paragraphs. Accordingly, there is no basis in the record of this prosecution history which justifies maintenance of this rejection.

In view of the above, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

Respectfully submitted,

Robert E. Bushnell

Attorney for the Applicant Registration No.: 27,774

1522 "K" Street N.W., Suite 300 Washington, D.C. 20005 (202) 408-9040

Folio: P56687 Date: 2/12/07 I.D.: REB/kf